

**IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF OHIO
WESTERN DIVISION**

Heartwood, et al.,)	
)	
Plaintiffs,)	
)	
vs.)	Case No. 1:05-cv-313
)	
Dirk Kempthorne,)	
et al.,)	
)	
Defendants.)	

ORDER

This matter is before the Court on the parties’ cross-motions for summary judgment. (Docs. no. 58, 60). Plaintiffs move for summary judgment in their favor on Count Two of the Complaint. Defendants move for partial summary judgment in their favor. For the reasons that follow, Plaintiffs’ motion is **DENIED** and Defendants’ motion is **GRANTED**.

I. Introduction

Plaintiffs Heartwood, Southern Appalachian Biodiversity Project, Kentucky Heartwood, Indiana Forest Alliance, Buckeye Forest Council, Virginia Forest Watch, National Forest Protection Alliance, and Wild Virginia bring this action against Dirk Kempthorne in his official capacity as Secretary of the United States Department of the Interior; the United States Fish and Wildlife Service (“FWS”); H. Dale Hall in his official

capacity as Director of FWS; the United States Forest Service (“Forest Service”); and Dale Bosworth in his official capacity as Chief of the Forest Service. Plaintiffs describe themselves as not-for-profit environmental corporations with an interest in the protection of national forests and biodiversity and native species within the forests. Plaintiffs initially filed a two-count complaint, which they subsequently amended. The parties thereafter entered into a Settlement Agreement as to Count One of the Second Amended Complaint. Doc. no. 41.

Plaintiffs subsequently filed a Third Amended Complaint (doc. no. 52), which they supplemented on May 3, 2007. Doc. no. 71. Plaintiffs summarize their case as a civil action brought pursuant to the Endangered Species Act (“ESA”), 16 U.S.C. § 1531, et seq., and the Administrative Procedure Act (“APA”), 5 U.S.C. § 701, et seq., to protect the critically endangered Indiana bat, *Myotis sodalis*. The first claim concerns FWS’s failure to make findings on Plaintiffs’ October 2002 petition to revise the critical habitat of the Indiana bat and is the subject of the Settlement Agreement that the parties entered into on May 19, 2006, pursuant to which FWS agreed to consider Plaintiffs’ petition.¹ Plaintiffs allege as their second claim that FWS and its employees are acting in an arbitrary and capricious manner and contrary to law by repeatedly finding in 14 Biological Opinions (“BiOps”) issued by FWS that proposed Forest Service actions in various National Forests which are the subject of the BiOps will not jeopardize the

¹ Because the first claim has been resolved by the Settlement Agreement, it is not addressed in the summary judgment motions.

continued existence of the Indiana bat. Plaintiffs allege that they have members who use and enjoy National Forests in which Indiana bats are found and these members will be harmed if the bats disappear from the forests.

Plaintiffs make the following factual allegations in the Third Amended Complaint:² In 1983, the Recovery Team for the Indiana bat, in conjunction with FWS, approved and issued a final Recovery Plan for the Indiana bat with the objective of removing it from endangered status.³ The Recovery Plan purportedly used the best available science as of 1983 and has not been challenged, although additional scientific information about the Indiana bat hibernacula has come to light since the Recovery Plan was formulated and the population figures in the Plan are not up-to-date. Estimates provided by FWS indicate that the Indiana bat population has decreased by approximately 40% since 1980, but Defendants have not revised the 1983 Recovery Plan. The entire range-wide population of Indiana bats currently is approximately 325,000, and every range-wide population count conducted since the formulation of the Recovery Plan has

²Many of these factual allegations are set forth in the Court's Order on Defendants' Motion to Dismiss issued on October 18, 2005 (doc. no. 20) but are repeated herein for ease of reference.

³A Recovery Plan analyzes the means by which an endangered species may be recovered and eventually removed from the endangered species list throughout its range. 16 U.S.C. § 1533(f).

documented a continuing decline in the species population.⁴

During the winter, Indiana bats hibernate in caves that meet specific temperature and humidity criteria and occasionally in other structures with similar environmental conditions. Eighty-five percent of the total Indiana bat population hibernates in nine caves, which have been designated as “critical habitat” for the species and are thus protected under the ESA. In the weeks before hibernation, the bats swarm together in the forest surrounding the hibernacula, during which time they roost on trees around the hibernacula, mate, and prepare for hibernation, in part by eating large numbers of a variety of flying insects. The bats forage primarily in and around forested habitat and also over ponds and lakes and occasionally over open areas or edges of the forest. The bats migrate to summer habitats after hibernation, where they usually roost under loose tree bark on dead, dying and live trees, with the preferred primary roost trees being large or dying trees within the forest which have exfoliating bark and proper solar exposures. Males roost alone or in small groups, while females roost in maternity colonies of up to 100 bats. The female roosting sites consist of a number of different roost trees scattered over a thousand or more acres. A colony may have one or more primary roost trees, but individuals from colonies may move to alternate roost trees which provide shelter from storms, heat and cold.

⁴Plaintiffs state in their response brief that the parties agree that as of 2005, the same year Plaintiffs filed their original complaint, the estimated population of the Indiana bat stood at 457,374.

Indiana bats are known to occur in Alabama, Arkansas, Georgia, Iowa, Illinois, Indiana, Kentucky, Kansas, Maryland, Missouri, Michigan, Mississippi, North Carolina, New Jersey, New York, Ohio, Oklahoma, Pennsylvania, South Carolina, Tennessee, Virginia, Vermont, West Virginia, and New Hampshire.

II. Claim for relief

The sole remaining claim for relief brought by the Plaintiffs is their second claim that the BiOps listed in the complaint, which contain findings that proposed actions by the Forest Service are not likely to jeopardize the continued existence of the Indiana bat, violate the ESA and the APA. Plaintiffs allege that the findings of “no jeopardy” made in the BiOps are arbitrary and capricious and fail to conserve the Indiana bat. Plaintiffs allege that both FWS and the Forest Service continue to rely on the illegal and improper findings in many of the BiOps to authorize Forest Service activities that harm the Indiana bat and jeopardize the continued existence of the bat. The BiOps that are purportedly being used in this manner are those for Wayne National Forest, Monongahela National Forest, Huron-Manistee National Forest, Allegheny National Forest, Mark Twain National Forest, Daniel Boone National Forest, and Pisgah and Nantahala National Forests.

As relief, Plaintiffs seek the following:

1. A declaration that Defendants have violated and continue to violate the ESA and the APA; that FWS's BiOps violate the Acts by making "no jeopardy" findings without adequately addressing the impacts on the Indiana bat of other BiOps and Incidental Take⁵ Statements and by failing to consider the impact of state and private actions in combination with federal actions; that the Incidental Take Statements issued by FWS are invalid because they violate the Acts by jeopardizing the continued existence of the Indiana bat; and that FWS's definition of the term "jeopardize the continued existence of" found at 50 C.F.R. § 402.02, as applied to the challenged actions in this case, violates the ESA;
2. A declaration directing Defendants to comply with § 7(a)(2) of the ESA, 16 U.S.C. § 1536(a)(2), by requesting formal consultation regarding the total impacts of federal activities on the Indiana bat, together with all other impacts adversely affecting the species, and by preparing a BiOp for the Forest Service that considers all such impacts;
3. An injunction enjoining all of Defendants' activities that will foreclose the formulation or implementation of measures that are necessary to avoid jeopardizing the continued existence of the Indiana bat or are for the recovery of the species, until Defendants have completed lawful consultation as required by § 7(a)(2) of the ESA, and enjoining all of Defendants' activities that "take" Indiana bats in violation of the ESA, until such time as Defendants properly consider the impact of all authorized taking in combination with other cumulative effects on the total population of the species; and
4. Other miscellaneous relief.

⁵The term "take" as defined under the ESA, 16 U.S.C. § 1532(19), means "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct."

III. The parties' motions

A. Plaintiffs' motion

Plaintiffs allege that they have standing to maintain this action and that the APA provides the applicable standard of review. Plaintiffs state in their summary judgment brief that by agreement of the parties, the memorandum addresses the following forests and forest plans: the Monongahela National Forest, West Virginia; the Pisgah National Forest Management Plan, North Carolina; Allegheny National Forest, Pennsylvania; Daniel Boone National Forest Management Plan with Special Amendment; Daniel Boone National Forest, Kentucky; and Jefferson National Forest, Virginia. Plaintiffs describe this action as one seeking redress for the following: (1) FWS's arbitrary and capricious issuance of "no jeopardy" BiOps to the Forest Service concerning the Indiana bat without the proper analysis; (2) the Forest Service's reliance on the invalid BiOps; and (3) the failure of FWS and the Forest Service to conduct an aggregate analysis of the effects of the Forest Service's management practices on the Indiana bat.

Plaintiffs contend that the Indiana bat may be in danger of extinction, making the ESA implementing regulations and the Final ESA Section 7 Consultation Handbook (March 1998), which together define the steps in the jeopardy analysis for an endangered species, applicable. Plaintiffs claim that each BiOp makes a finding of "no jeopardy" due to the failure of FWS to conduct analyses in compliance with the law, regulations and the Consultation Handbook. Plaintiffs allege that Defendants have failed to comply with the ESA by failing to assess current population growth rates of the Indiana bat, to identify

both a survival and recovery threshold, and to calculate the change in the current survival rates that will be needed to allow the Indiana bat to survive with an adequate potential for recovery.

B. Defendants' cross-motion

Defendants originally disputed Plaintiffs' standing to challenge several of the BiOps in issue on the ground that Plaintiffs lacked a personal interest or stake in the outcome of the controversy with regard to certain forests. Defendants have since conceded that Plaintiffs have standing to challenge all of the BiOps in issue. Defendants contend, however, that Plaintiffs' challenges to the 2000 Daniel Boone BiOp, the 2002 Monongahela BiOp, and the 1999 Allegheny BiOp are moot because those BiOps have been superseded by more recently issued BiOps or documents.

In addition, Defendants initially requested a stay or voluntary remand of the 2004 Daniel Boone BiOp on the ground that the Forest Service had reinitiated consultation on that BiOp for the purpose of considering information relevant to the range-wide status of the species and anticipated issuing a superseding document. Defendants subsequently gave notice that a superseding BiOp for the Daniel Boone National Forest was issued on April 3, 2007. Doc. no. 67. Plaintiffs substituted the 2007 Daniel Boone BiOp for the 2004 BiOp in the supplemented Third Amended Complaint. See doc. no. 71, ¶ 64.

Defendants argue in their summary judgment briefs that Plaintiffs failed to identify any errors in the only two BiOps that had not been superseded by more recently-issued documents at the time the summary judgment briefing was completed, i.e., the Jefferson

BiOp and the Pisgah BiOp. Defendants argue that FWS complied with the ESA in formulating the BiOps and Plaintiffs have made no showing that the Forest Service acted in an arbitrary and capricious manner by relying on these BiOps.

Defendants also argue that the Court lacks jurisdiction over Plaintiffs' allegations regarding the Forest Service and FWS's general practices relating to the Indiana bat as opposed to their challenges to particular agency actions. Defendants allege that by challenging these agencies' general practices, Plaintiffs are actually making a collateral attack on the Recovery Plan for the Indiana bat, which the Court cannot consider as the Recovery Plan is not currently before the Court.

Plaintiffs counter that the issuance of "no-jeopardy opinions" for every National Forest where the Indiana bat is found regardless of the amount or location of logging, burning, and development in that particular forest is arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with the law. Plaintiffs argue that FWS is allowing Forest Service projects to proceed that make the species survival and recovery less likely, and it is doing nothing to ensure recovery and survival. Plaintiffs allege that FWS cannot ignore "recovery" of the species in making the jeopardy determination and "recovery" has no meaning until FWS identifies a "numerical, quantifiable range" when the species is "recovered." Plaintiffs contend that without a recovery number, the challenged BiOps violate the ESA. Plaintiffs also allege that the BiOps are deficient in numerous other respects as set forth in Section VII of this Order.

IV. Summary judgment standard

Summary judgment is proper “if the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to judgment as a matter of law.” Fed. R. Civ. P. 56(c). The evidence presented on a motion for summary judgment is construed in the light most favorable to the non-moving party, who is given the benefit of all favorable inferences that can be drawn therefrom. United States v. Diebold, Inc., 369 U.S. 654, 655 (1962). “[T]he mere existence of some alleged factual dispute between the parties will not defeat an otherwise properly supported motion for summary judgment; the requirement is that there be no genuine issue of material fact.” Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 247-248 (1986) (emphasis in original). The court will not grant summary judgment unless it is clear that a trial is unnecessary. The threshold inquiry to determine whether there is a need for trial is whether “there are any genuine factual issues that properly can be resolved only by a finder of fact because they may reasonably be resolved in favor of either party.” Anderson, 477 U.S. at 250. There is no issue for trial unless there is sufficient evidence favoring the non-moving party to permit a verdict for that party. Id.

In determining whether a party is entitled to summary judgment on a claim brought under the APA, the Court must ask whether the specific facts alleged raise a genuine issue of fact as to whether an agency action taken by the Defendant caused the Plaintiff to be “adversely affected or aggrieved” within the meaning of the relevant statute. Lujan v. Nat’l Wildlife Federation, 497 U.S. 871, 878 (1990).

V. Request for oral argument

The parties have requested oral argument on their motions. Pursuant to Rule 7.1 of the Local Rules of the United States District Court for the Southern District of Ohio, a party may request oral argument on a summary judgment motion on the ground that oral argument is essential to a fair resolution of the case because of its public importance or the complexity of the factual or legal issues presented.

The legal and factual issues involved in this case have been fully briefed by the parties. The Court finds that oral argument would not further assist it in resolving the issues presented by the summary judgment motions. Accordingly, the request for oral argument is denied.

VI. Applicable law

A. Standing

For a party to have the requisite standing under federal law, that party must satisfy both Article III considerations and prudential considerations. Coyne v. American Tobacco Co., 183 F.3d 488, 494 (6th Cir. 1999). In order to satisfy Article III considerations, the plaintiff must show that he suffered an injury-in-fact, which is both actual or imminent and concrete and particularized; the injury is fairly traceable to the challenged action of the defendant; and it is likely, as opposed to merely speculative, that the injury will be redressed by a favorable decision. Friends of the Earth, Inc. v. Laidlaw Environmental Services (TOC), Inc., 528 U.S. 167, 181-82 (2000). To satisfy prudential considerations, the plaintiff must “assert his own legal rights and interests, and cannot rest his claim to

relief on the legal rights or interests of third parties.” Coyne, 183 F.3d at 494 (citing Warth v. Seldin, 422 U.S. 490, 499 (1975)). Second, plaintiff’s claim must be more than a “generalized grievance” widely shared by a large class of citizens. Id. (citing Valley Forge Christian College v. Americans United for Separation of Church & State, Inc., 454 U.S. 464, 474-75 (1982)). Third, in a statutory case, plaintiff’s claim must fall within the “zone of interests” regulated by the statute in question. Id. (citing Valley Forge, 454 U.S. at 474-75).

B. The APA

The APA entitles an individual who is aggrieved by an agency action within the meaning of a relevant statute to review of the agency action. 5 U.S.C. § 702. In reviewing an action under the APA, the determination to be made is whether the agency acted in a manner that was “arbitrary, capricious, an abuse of discretion or otherwise not in accordance with law.” 5 U.S.C. § 706(2)(A). An agency rule or action is arbitrary and capricious if the agency “has relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise.” Citizens Coal Council v. U.S. EPA, 447 F.3d 879, 890 (6th Cir. 2006) (citing Motor Vehicle Ass’n v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43 (1983)). The reviewing court must make a “searching and careful review” in assessing the agency action, but “the ultimate standard of review is a narrow one.” Id. (citing Citizens to Preserve

Overton Park, Inc. v. Volpe, 401 U.S. 402, 416 (1971)). If the action under review requires review of the agency's technical or scientific evaluations and determinations, "the highest level of deference to the agency is to be applied." Id. (citing Baltimore Gas & Elec. v. Natural Res. Def. Council, Inc., 462 U.S. 87, 103 (1983) (a reviewing court must be at its most deferential when examining a scientific determination within an agency's area of special expertise) and BP Exploration & Oil, Inc. v. U.S. EPA, 66 F.3d 784, 792 (6th Cir. 1995)).

C. FWS and Forest Service obligations under the ESA

The Forest Service manages National Forests pursuant to the National Forest Management Act ("NFMA"), 16 U.S.C. § 1600, et seq. Under the NFMA, 16 U.S.C. § 1604, the Forest Service must create land and resource management plans for the forests within its jurisdiction. The planning process consists of two stages: programmatic and site specific. Ohio Forestry Ass'n v. Sierra Club, 523 U.S. 726, 729-30 (1998). The programmatic stage involves the development of a broad, long-term planning document for an entire forest. The forest plan guides the management of the forest in a multiple-use framework. 16 U.S.C. § 1604(e)(1). It establishes planning goals and objectives for units of the National Forest system and specific standards and guidelines for management of forest resources, taking into account both environmental and economic factors. 16 U.S.C. § 1604(g)(1)-(3). There is an opportunity for public participation in development of the plan and for public review of the plan and comment. 16 U.S.C. § 1604(d).

Forest plans are implemented through individual site-specific projects. Northwoods

Wilderness Recovery v. U.S. Forest Serv., 323 F.3d 405, 407 (6th Cir. 2003). At this stage, the Forest Service proposes, analyzes, and decides upon specific actions.

The ESA expresses a legislative mandate that the Forest Service, FWS, and other federal agencies “afford first priority to the declared national policy of saving endangered species.” TVA v. Hill, 437 U.S. 153, 184 (1978). The ESA authorizes the Secretary of the Interior to list a species of wildlife as either “endangered” or “threatened.” 16 U.S.C. § 1533. The Act requires each federal agency to “insure that any action authorized, funded, or carried out by such agency . . . is not likely to jeopardize the continued existence of an endangered or threatened species or result in the destruction or adverse modification of [the critical] habitat of such species . . .” 16 U.S.C. § 1536(a)(2). “‘Jeopardize the continued existence of’ means to engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species [i.e., a species which has been determined to be endangered or threatened under the Act] in the wild by reducing the reproduction, numbers, or distribution of that species.” 50 C.F.R. § 402.02. “‘Recovery’ means improvement in the status of listed species to the point at which listing is no longer appropriate under the criteria set out in section 4(a)(1) of the Act.” Id.

Section 7 of the ESA, 16 U.S.C. § 1536, and its implementing regulations found at 50 C.F.R. Part 402 establish the procedure for determining the impacts of a proposed federal agency action. An agency that proposes an action must first determine whether the action “may affect” the listed species or critical habitat. 50 C.F.R. § 402.14(a). With

certain exceptions, if an agency determines that an action it proposes to take may adversely affect a listed species or critical habitat, it must engage in formal consultation with FWS to determine whether the proposed action may jeopardize the continued existence of the endangered species or critical habitat. Id.; 16 U.S.C. § 1536(a)(2). The federal agency requesting consultation must provide FWS the best scientific and commercial data available. 16 U.S.C. § 1536(a)(2); 50 C.F.R. § 402.14(d).

FWS's responsibilities during formal consultation are to review all relevant information provided by the federal agency or otherwise available; evaluate the current status of the listed species or critical habitat; evaluate the effects of the action and cumulative effects on the listed species or critical habitat; formulate its BiOp as to whether the action, taken together with the cumulative effects, is likely to jeopardize the existence of the species or result in the destruction or adverse modification of critical habitat; and discuss with the federal agency and any applicant FWS's review and evaluation, the basis for any finding in the BiOp, and in the event a jeopardy opinion is to be issued, the availability of reasonable and prudent alternatives that the agency and applicant can take to avoid violating § 7(a)(2). 50 C.F.R. § 402.14(g). The BiOp produced must include a summary of the information on which FWS's opinion is based; a detailed discussion of the "effects of the action" on the listed species or its critical habitat; FWS's determination of "jeopardy" or "no jeopardy;" and reasonable and prudent alternatives in the event a jeopardy determination is made. 16 U.S.C. § 1536(b)(3)(A); 50 C.F.R. § 402.14(h).

Title 50 C.F.R. 402.02 defines the terms associated with formal consultation and the

resulting BiOp. “Cumulative effects” are “those effects of future State or private activities, not involving Federal activities, that are reasonably certain to occur within the action area of the Federal action subject to consultation.” “Effects of the action” means “the direct and indirect effects of an action on the species or critical habitat, together with the effects of other activities that are interrelated or interdependent with that action, that will be added to the environmental baseline.” “Indirect effects” are effects “that are caused by the proposed action and are later in time, but still are reasonably certain to occur.” “Interrelated actions” are actions “that are part of a larger action and depend on the larger action for their justification.” “Interdependent actions” are actions “that have no independent utility apart from the action under consideration.” “Environmental baseline” is an assessment that “includes the past and present impacts of all Federal, State, or private actions and other human activities in the action area, the anticipated impacts of all proposed Federal projects in the action area that have already undergone formal or early section 7 consultation, and the impact of State or private actions which are contemporaneous with the consultation in process.” “Action area” means all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action. “Reasonable and prudent alternatives” means “alternative actions identified during formal consultation that can be implemented in a manner consistent with the intended purpose of the action, that can be implemented consistent with the scope of the Federal agency’s legal authority and jurisdiction, that [are] economically and technologically feasible, and that the Director believes would avoid the likelihood of jeopardizing the continued existence of listed

species or resulting in the destruction or adverse modification of critical habitat.” 50

C.F.R. 402.02.

If FWS concludes that the agency action will not result in jeopardy to the species, or if FWS offers “reasonable and prudent alternatives” to avoid that consequence, FWS must provide the agency with an “Incidental Take Statement.” 16 U.S.C. § 1536(b)(4). The Incidental Take Statement must specify “the impact of such incidental taking on the species,” those “reasonable and prudent measures that [FWS] considers necessary or appropriate to minimize such impact,” and “the terms and conditions . . . that must be complied with by the Federal agency or applicant (if any) or both, to implement [those measures].” *Id.* “Incidental take” means “takings that result from, but are not the purpose of, carrying out an otherwise lawful activity conducted by the Federal agency or applicant.” 50 C.F.R. § 402.02. “Reasonable and prudent measures” means “those actions the Director believes necessary or appropriate to minimize the impacts, i.e., amount or extent, of incidental take.” *Id.* If the proposed action complies with the terms and conditions of the Incidental Take Statement, the incidental take is not prohibited under the ESA. 16 U.S.C. § 1536(o)(2).

VII. Opinion

A. Standing/mootness

Plaintiffs concede that their challenges to the 2000 Daniel Boone and 2002 Monongahela BiOps are moot because those particular BiOps have been superseded by more recent BiOps (although Plaintiffs contend that the BiOps are relevant to the

“environmental baseline” analysis). Plaintiffs’ challenges to those particular BiOps will therefore be dismissed as moot. Because the 1999 Allegheny BiOp has also been superseded by a January 31, 2007, FWS concurrence letter finding that the revised forest plan is not likely to adversely affect the Indiana bat (doc. no. 65, exh. 1), Plaintiffs’ challenge to the 1999 Allegheny BiOp will likewise be dismissed as moot.

Defendants concede that Plaintiffs have standing to challenge the Jefferson and Pisgah BiOps. The Court is satisfied that Plaintiffs have alleged an injury-in-fact that is fairly traceable to the challenged action and have demonstrated a personal stake in the outcome of the challenges to these BiOps and to the 2007 Daniel Boone BiOp sufficient to satisfy Article III and prudential standing requirements. Plaintiffs may proceed with their challenges to these three BiOps.

B. Challenge to Forest Service and FWS management and practices

Plaintiffs deny that this lawsuit is a challenge to Forest Service and FWS overall management and practices with regard to the Indiana bat. Plaintiffs make arguments and allegations throughout their briefs, however, that suggest otherwise. Plaintiffs describe Claim Two as concerning “the assessment of the Forest Service’s range-wide effects on the survival and recovery of the Indiana bat.” Doc. no. 58, p. 3. Plaintiffs generally allege that “institutionalized caution” should guide all decisions regarding the Indiana bat consistent with Congressional intent in enacting the ESA, which is to conserve endangered and threatened species. Plaintiffs contend that neither the Forest Service nor FWS can state what the aggregate effect of Forest Service management is on the Indiana bat. Plaintiffs claim that the Indiana bat cannot be expected to survive and recover under the Forest Service’s continued method of management of the National Forests, the effects of the declining environmental baseline, and the cumulative effects; FWS has failed to conduct an aggregate analysis of the effects of Forest Service management practices on the Indiana bat; and the BiOps fail to identify a number that represents the point at which the Indiana bat

will survive, a number that represents the point at which the Indiana bat will recover, and a number that represents the point at which the total population will become extinct.

Plaintiffs claim that FWS violates the ESA “when it repeatedly fails to take the ‘big picture’ look at the Indiana bat in the [BiOps] issued to the Forest Service.” Doc. no. 58, p.

11. Plaintiffs attribute the decline in the species population to non-specific actions by Defendants such as “[c]reating verifiable, objective protection for the caves while creating vague, inconsistent protection for the non-cave habitat . . .” Id. Plaintiffs claim that as a result of these failings, FWS violates 16 U.S.C. § 1536(a)(2) with the issuance of each BiOp and Incidental Take Statement to each National Forest in the Indiana bat’s range.

Moreover, when representing to the Court that no additional briefing would be necessary as a result of supplementing the complaint with the 2007 Daniel Boone BiOp, Plaintiffs indicated that their claims are in large part directed against Forest Service and FWS practices that transcend specific violations in the individual BiOps by stating as

follows:

Plaintiffs filed the instant cause with the challenges to a number of [BiOps] based on the fact that the Indiana bat has an extensive summer habitat. Each of the National Forests identified in Paragraph 64 of the Complaint hosts Indiana bats at some point during the calendar year. The Daniel Boone Incidental Take Statement should be analyzed cumulatively with other Incidental Take Statements issued to other National Forests. Claim Two alleges that the Fish and Wildlife Service issues inconsistent Incidental Take Statements and issues only ‘no jeopardy’ opinions. The Daniel Boone incidental take statement - the 2004 incidental take statement being identical to the 2007 incidental take statement - reaches improper and illegal conclusions in the same way as each of the other challenged incidental take statements.

Doc. 69-2, pp. 3-4.

It is incumbent upon Plaintiffs to go beyond these generalized complaints regarding the Forest Service’s management of the National Forests and FWS’s practices and to direct their challenge against some particular agency action that causes them harm. See Lujan, 497 U.S. at 882. Plaintiffs acknowledge as much at various points in their briefs by stressing that they bring this lawsuit to ask the Court to review the BiOps themselves, that their challenge is to the BiOps referenced in the complaint, and that they seek to force FWS to issue BiOps that comply with the ESA. Doc. no. 62, pp. 2, 4. Thus, it is the individual BiOps to which the Court must look to determine if Plaintiffs can establish a violation of the ESA. The Court must examine each BiOp under the standard of review set forth in the APA to ascertain if there are genuine issue of fact as to whether Defendants have complied with the ESA or whether they have acted in a manner that is arbitrary and capricious or otherwise not in accordance with law or have abused their discretion in connection with the

issuance of a particular BiOp.

C. The Pisgah, Jefferson and 2007 Daniel Boone BiOps

The Pisgah, Jefferson and 2007 Daniel Boone BiOps are the only BiOps currently before the Court for review on summary judgment. Plaintiffs make few specific allegations about the Jefferson and Pisgah BiOps in their summary judgment briefs, but presumably many of their more generalized allegations are meant to apply to these BiOps. Plaintiffs obviously make no specific allegations about the 2007 Daniel Boone BiOp since that BiOp was not issued until after briefing had been completed. However, Plaintiffs represent in their motion to supplement that the 2007 Daniel Boone Incidental Take Statement is identical to the 2004 Incidental Take Statement, so that Plaintiffs' allegations of flaws in the earlier statement would apply as well to the later statement. The Court will therefore consider Plaintiffs' allegations as they potentially pertain to these three BiOps. With regard to each BiOp, the ultimate question is whether Plaintiffs have pointed to specific evidence in the record to show that the BiOp violates the ESA in any respect.

Plaintiffs allege in their complaint that the findings made in the BiOps are deficient in the following respects:

- The BiOps are not consistent in how they measure the “take” authorized in the Incidental Take Statements, making it impossible to determine the exact impact on the species overall.
- The BiOps do not consider the cumulative impact of the previously-granted Incidental Take Statements to the Forest Service and other agencies; they do not consider the indirect impacts on the species as a whole outside the area of direct effects but instead consider the action area to be the area of direct effects; and they do not consider the many thousands of acres of impermissible logging on state and private land.
- The Defendants have failed to properly establish, analyze, and consider the “environmental baseline” for the Indiana bat. The BiOps do not discuss in any relevant detail the impact of the total take together on the overall population of the species and its recovery and do not consider the area that might be indirectly impacted. There is no meaningful or relevant discussion in any of the BiOps about the sustained population loss that is moving the species toward extinction.
- The “no jeopardy” determinations contained in the BiOps fail to conserve the Indiana bat because the Forest Service activities allowed by FWS threaten the species’ ability to survive and recover. The determinations allow the population to decline to such a low level that the species may not survive and may never be able to recover.

In their summary judgment briefs, Plaintiffs elaborate on how the BiOps purportedly violate the ESA. Plaintiffs use the 2004 Daniel Boone National Forest BiOp as an illustrative example of the flaws in all of the BiOps. They claim that this particular BiOp violates the ESA in the following respects: (1) the “action area” is defined too narrowly; (2) no site-specific Section 7 consultation takes place as required by the 2004 Land and Resource Management Plan, which is the framework by which the Forest Service operates; (3) there is no adequate analysis of logging or of “population variability” as required pursuant to the Consultation Handbook, 4-21⁶; and (4) the “environmental baseline” analysis includes no qualitative analysis of certain activities and neglects to address required factors under the Consultation Handbook. Plaintiffs claim that FWS’s failure to discuss what various percentage determinations made in the BiOps mean to the Indiana bat constitutes a failure to make a “rational connection between the facts found and the choice made” (see Nat’l Wildlife Federation v. Norton, 332 F.Supp.2d 170, 177 (D.D.C. 2004)); the cumulative effects analysis is insufficient; and while the BiOps may address many factors, they do not contain an aggregate effects analysis as part of the jeopardy determination.

Plaintiffs also allege that the Incidental Take Statements issued by FWS do not

⁶This provision states: “Fluctuations in a species’ population over time can affect significantly the probability of its extinction. Population variability is affected by several characteristics of a species’ life history: unstable age distributions and reproductive rates; widely variable mortalities resulting from unstable food resources or predation; population density; sex ratios; recolonization rates; and genetic viability. As population fluctuates, one or more factors can lead to chance extinction, e.g., irreversibly lowering population size to a point where it can no longer recover. Consequently, an action increasing a species’ population variability may affect the continued existence of the species more significantly than a reduction in population size.”

comply with the ESA because they fail to factor in the aggregate take of Indiana bats resulting from each federal activity affecting the species, are inconsistent, and are not based on consideration of the relevant factors. Plaintiffs argue that each of the statements is flawed because FWS uses summer habitat loss as a proxy for measuring take when it has no documentation to show that acres of trees cut and burned is a scientifically appropriate proxy under the applicable test, i.e., whether the proxy method “‘reasonably ensures’ that the proxy results mirror reality.” See Gifford v. Pinchot Task Force v. U.S. Fish & Wildlife Service, 378 F.3d 1059, 1066 (9th Cir. 2004) (citing Idaho Sporting Cong., Inc. v. Rittenhouse, 305 F.3d 957, 972-73 (9th Cir. 2002)).

In ascertaining whether Plaintiffs have pointed to specific evidence that demonstrates that the “no jeopardy” determinations are arbitrary and capricious for the reasons alleged, the Court must determine whether the record shows that FWS “entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or [whether its determinations are] so implausible that [they] could not be ascribed to a difference in view or the product of agency expertise.” See Citizens Coal Council, 447 F.3d at 890. In particular, the Court must consider whether the BiOps specify (1) the impact of the incidental taking on the species, (2) the reasonable and prudent measures to be taken to minimize the impact, and (3) the terms and conditions that must be complied with by the agency or applicant to implement the measures. 16 U.S.C. § 1536(b)(4). The Court must also ascertain whether, in making the “no-jeopardy” determinations, FWS considered (1) the current status of the species, which is a range-wide

analysis; (2) the environmental baseline in the action area; (3) the direct and indirect effects of the proposed action on species and critical habitat; and (4) the cumulative effects of future actions that are reasonably certain to occur in the action area. See Consultation Handbook, 4-35. In undertaking its review, the Court must accord substantial deference to the “no-jeopardy” determinations because they involve matters within the area of FWS’s scientific expertise.

1. Environmental baseline

Plaintiffs contend that Defendants have failed to properly establish, analyze and consider the environmental baseline for the Indiana bat. Plaintiffs specifically allege that the environmental baseline analysis includes no qualitative analysis of the impact of logging, burning and associated activities on the species and neglects to address disturbance frequency, intensity, and severity, as well as sensitivity to change, resilience and recovery rate. Plaintiffs allege that the BiOps do not discuss in any relevant detail the impact of the total take together on the overall population of the species and do not consider the area that might be indirectly impacted.

Defendants claim that Plaintiffs misunderstand the scope of the environmental baseline analysis. They stress that the environmental baseline is an analysis of the baseline of the species in the “action area,” i.e., the geographic area affected by the proposed action, and the effects of any action outside the action area, such as the effects of other forest plans, are not within the scope of the baseline analysis. Defendants allege that the environmental baseline analyses in question effectively provide a snapshot of the health of the species at

the time of consultation, taking into account the population estimates, distribution of the species in the action area, and discussions of habitat conditions, as well as the direct and indirect effects of the action, including the effects of timber harvest and salvage, miscellaneous activities that result in removal of trees (e.g., personal firewood use, trail construction, and wildlife and fishery habitat management, prescribed burning, removal of living trees or snags, and the use of herbicides and pesticides), and the effects of smoke on any hibernacula located on the forest.

Plaintiffs have not pointed to specific evidence that shows that the environmental baseline analyses are flawed in any material respect. As Defendants correctly note, and as Plaintiffs acknowledge, the environmental baseline is an assessment based on the impact of various government and private projects and activities in the action area. Thus, the environmental baseline need not analyze the impact of the total take in all national forests on the overall population of the species. Rather, the environmental baseline is adequate if it provides a snapshot of the health of the species within the action area without considering the effects of the proposed action. Consultation Handbook , 4-22.

The BiOps in issue provide detailed assessments of the environmental baseline in the relevant geographic areas. The Jefferson BiOp sets forth the number of acres of total Indiana bat habitat that has been destroyed annually on the forest and the percentage of the forested land base that is likely to provide both the species and size classes of trees suitable for potential roost sites (a minimum of 88%, or 620,100 acres). Jefferson BiOp, p. 18. The BiOp sets forth population figures for the species within hibernacula on or near the forest for

years dating back to 1970. Jefferson BiOp, p. 19. The BiOp states based on the number of bats known from those hibernacula and ten years of survey data collected from the hibernacula that an average of 443 Indiana bats may forage and roost on or near the forest each summer. Based on certain assumptions set forth in the report, the BiOp calculates that the bats have approximately 6 million acres of land available to them, of which approximately 611,000 acres are owned by the forest. Jefferson BiOp, p. 22. The BiOp concludes that an estimated 44 Indiana bats may forage and roost on the forest itself, if the bats are evenly distributed, which the BiOp found to be unlikely since male bats may be found closer to the hibernacula and pregnant females would be found in maternity colonies, which could occur anywhere within the suitable habitat. Jefferson BiOp, pp. 17-23.

The Pisgah BiOp acknowledges that the environmental baseline must include all Forest Service projects approved prior to initiation of formal consultation with the Forest Service in the action area. Pisgah BiOp, p. 28. The BiOp states that although the action area covers over one million acres, no critical habitat occurs within the project area (although a hibernacula that has been designated as a critical habitat, the Whiteoak Blowhole Cave, is located nearby); less than 1% of the known range of the Indiana bat is impacted; and less than 2% of the known Indiana bat population occurs within the consultation area. Pisgah BiOp, p. 28. The BiOp concludes that there are approximately 490,000 acres on the forests that could provide optimal foraging habitat, optimal live potential roost trees, and suitable dead potential roost trees, all on the same acre, for Indiana bats that migrate from the Whiteoak Blowhole Cave for summer habitat. Pisgah BiOp, p. 38.

The 2007 Daniel Boone BiOp indicates that the action area's surface land area is approximately 3,191 square miles, which constitutes approximately .55% of the total range of the species. 2007 Daniel Boone BiOp, p. 70. The BiOp notes that although the action area does not contain any designated critical habitat, it does contain over 50 hibernacula and there are "64 known capture locations within the proclamation boundary" based on FWS records derived primarily from caves. Id. The BiOp estimates that the action area provides winter habitat for about 3% of the range-wide Indiana bat population in Kentucky, or 15,600 bats.⁷ Id. The BiOp states that existing data indicate that most of the bats that hibernate within the action area migrate outside of the area, although there is evidence that other bats may remain in the action area year-round. Id. at 71. The BiOp provides little detailed information about the distribution of suitable Indiana bat habitat in the action area but states that suitable habitat is distributed throughout the area. Id. at 71-72.

Plaintiffs have not pointed to evidence in the record that calls the findings underlying the environmental baseline assessments into question. Plaintiffs have not cited to specific portions of the record to show that the BiOps fail to take into account the impacts of government and private actions in the action area, to the extent those impacts are able to be determined. Nor have Plaintiffs pointed to evidence indicating that there are areas outside of the action area that might be impacted by activities in the action area and which the

⁷Plaintiffs state in their response brief that the environmental baseline for the 2004 Daniel Boone BiOp states that the forest harbors 20-25% of the total population of Indiana bats. See BiOp, p. 24. This is incorrect. The BiOp actually states that the forest harbors 20-25% of "the total known Indiana winter bat population in Kentucky." Id.

environmental baselines for the BiOps fail to take into account. For these reasons, Plaintiffs' allegation that Defendants have violated the ESA by failing to properly establish and analyze the environmental baseline for the Indiana bat is not well-taken.

2. Effects of the action

Plaintiffs claim that the action area for the Indiana bat is defined too narrowly in the BiOps because it does not consist of all areas to be affected directly or indirectly by the federal action and instead consists only of the immediate area involved in the action. Plaintiffs attempt to establish that the area actually impacted includes National Forests within a 300-mile radius of the forest in question based on evidence that Indiana bats may migrate up to this distance. Defendants allege that Plaintiffs' attempt to extend the action area in this manner is inconsistent with the definition of the term. Defendants contend that the proper focus is on the effects of the proposed action in the area where the action will take place. Defendants also claim that the term "aggregate effects" refers to the sum total of the effects analyzed by FWS and does not expand the scope of the "effects of the action" analysis beyond the action area as Plaintiffs suggest in their summary judgment brief. Defendants specifically contend that FWS is not required to include the number of bats exempted from take in other forests in the direct/indirect effects analysis since the analysis is limited to the action area.

Initially, the Court finds that Plaintiffs are seeking to improperly expand the scope of the "action area." It is true that in making the jeopardy determination, the proposed action must be viewed against the aggregate effects of everything that has led to the species'

current status. Consultation Handbook, 4-35. However, there is no requirement that the BiOps include under “effects of the action” an analysis of the reasons for the overall decline of the species in areas not impacted by the Forest Services’ proposed actions as Plaintiffs suggest. The focus instead is on what the effects of the proposed actions will be on the species in the areas that are directly and indirectly impacted by the activities to be conducted in the forest. The Jefferson and Pisgah BiOps define such areas as the forests themselves. The 2007 Daniel Boone BiOp defines the action area as the “land area encompassed by the proclamation boundary of the [Daniel Boone National Forest] in Kentucky.” 2007 Daniel Boone BiOp, p. 6. There is no indication that the activities proposed for the forests will have impacts on any areas beyond the action areas as defined in the BiOps. Plaintiffs’ argument that the action area should encompass any National Forest within a 300-mile radius is not well-taken since Plaintiffs have not shown how other forests to which the Indiana bats might travel will be impacted by the proposed actions to take place in the forests that are the subjects of the BiOps. Accordingly, there is no basis for second-guessing FWS’s decision to define the action areas in the manner it determined.

Plaintiffs have not shown that the BiOps fail to adequately analyze the direct and indirect effects of the proposed actions in the action areas. The BiOps address the specific proposed activities, which include trail construction, timber harvest for salvage and other purposes, regeneration timber sales, salvage and firewood sales, routine creation and maintenance of small clearings, road construction/reconstruction, utility corridor construction, herbicide applications, prescribed burns, construction of facilities and coal

mining. The Jefferson BiOp acknowledges that timber sales, including salvage and firewood sales, are one of the primary management activities that alter and/or disturb the greatest acreage of forested habitat on the forest, and the BiOp places the projected total annual harvest of potentially suitable Indiana bat habitat at .2% of the forest's total land base. Jefferson BiOp, p. 4. Based on past figures, the BiOp estimates future projected amounts of salvage will range from 0-500 acres. *Id.*, p. 5. The report discusses separately the impact of each proposed action, including prescribed burns with resulting smoke, tree loss, and an increase in the number of snags⁸ available for roosting. The BiOp states that the 464,000 acres out of a total of 723,300 acres of the forest that are unsuitable for timber harvest will provide a continuous supply of roost trees and foraging areas. Jefferson BiOp, p. 8. The BiOp includes an extensive discussion of snags and a calculation that there are approximately 11,000,000 snags in the forest. *Id.*, p. 24. The BiOp states that the possibility of harming a bat from firewood cutting is remote. *Id.* The Pisgah BiOp includes a comparably thorough and detailed analysis of the direct and indirect effects of the proposed action at pages 38-53.

The 2007 Daniel Boone BiOp addresses the effects of green tree and salvage/sanitation harvests on foraging and roosting habitat. 2007 Daniel Boone BiOp, pp. 77-81. The BiOp estimates that a maximum of 4,350 acres of the forest would be affected each year, which would represent less than 1% of the potential suitable habitat. *Id.*, p. 82. The BiOp states that most of the harvests would occur in an area that comprises 54% of the

⁸ A "snag" is a dead tree that is still standing.

forest and none of the actions would involve the complete removal of suitable habitat. Id. pp. 82-83. The BiOp also addresses in great detail the effects of prescribed burns. Id., pp. 84-86. The BiOp discusses the species' response to the proposed actions, taking into account its sensitivity to change, its resilience and its recovery rate. Id., pp. 89-90.

The record discloses no reason to question the soundness of these analyses and the results drawn therefrom. Defendants have not violated the ESA by failing to adequately analyze the effects of the proposed actions in each of the forests in question.

3. Cumulative effects

Using the Daniel Boone 2004 BiOp as an example, Plaintiffs claim that the cumulative effects analysis is insufficient because it consists of one paragraph that states FWS is not aware of any future State, local, or private actions without articulating a satisfactory basis for this conclusion, despite an acknowledgment by FWS elsewhere in the BiOp that private individuals own tracts ranging from 100-300 acres and are engaging in logging, off-road vehicle use, recreational use of caves, and development. Plaintiffs' objection, however, is specific to the 2004 Daniel Boone BiOp. Plaintiffs have not shown that the objection has any applicability to either the Pisgah, Jefferson or 2007 Daniel Boone BiOp. Although the Pisgah BiOp likewise indicates that FWS is unaware of other future actions that are reasonably certain to occur within the action area that would not be subject to Section 7 review under the ESA (Pisgah BiOp, p. 53), Plaintiffs have not demonstrated that this assessment is inconsistent with other portions of the BiOp or that there were future actions known to FWS at the time it drafted the BiOp that it failed to take into account so as

to call into question the validity of FWS's statement. A review of the Jefferson BiOp shows that it includes a discussion of other actions and their impact. Jefferson BiOp, p. 30.

Plaintiffs have not shown the analysis in that particular BiOp to be flawed. Finally, the 2007 Daniel Boone BiOp explains that any actions reasonably certain to occur in the action area that are considered in the BiOp, including highway development and mining, will be carried out by, or will require a permit from, the Forest Service and will therefore require compliance with § 7 of the ESA. *Id.*, p. 90. The BiOp states that FWS is not aware of other actions that are reasonably certain to occur within the action area that would not be subject to § 7 review. *Id.* The BiOp acknowledges that there are private activities that are likely to occur on the in-holdings in the forest but indicates that the in-holdings are less than 200 acres, the activities are likely to be small in scale, and the actual activities that will take place are not known. *Id.*, p. 91. Again, Plaintiffs have not pointed to evidence showing that this analysis is flawed in any material respect.

Plaintiffs further allege that none of the BiOps contain an analysis of the effects and cumulative effects of the salvage logging of dead and dying trees. In fact, however, each of the BiOps in issue recognizes the importance of snags and dying trees to the Indiana bat and contains an analysis of the impact of salvage logging and of the proposed actions on the availability of roosts for the Indiana bats. Jefferson BiOp, pp. 23-26; Pisgah BiOp, pp. 40, 46-48; 2007 Daniel Boone BiOp, pp. 50, 93-94. Plaintiffs have not shown these particular BiOps are deficient in this respect.

4. BiOp conclusions

Plaintiffs claim that the BiOps contain no analysis as to whether the aggregate effects of the factors analyzed under the environmental baseline, effects of the action, and cumulative effects in the action area, when viewed against the status of the species or critical habitat, are likely to jeopardize the continued existence of the species or result in destruction or adverse modification of critical habitats. Plaintiffs indicate that the information contained in the Pisgah and Jefferson BiOps regarding previous incidental takes issued by FWS to the Forest Service is in fact sufficient, claiming that the information included in those BiOps is the information that should be in every BiOp issued by FWS. Plaintiffs go on to allege, however, that the BiOps should include “scientifically defensible rationale,” which is found in none of the BiOps. They indicate that the BiOps are deficient because

[T]here is no quantifiable figure from the FWS as to what amount of incidental take will rise to the level of effect that will significantly reduce the reproduction, overall population, or distribution of the bat. Furthermore, there is no statement from the FWS as to what the tipping point of the population is, at what point the Indiana bat can never be recovered.

Doc. no. 58, p. 17.

Plaintiffs specifically question the conclusion in the Pisgah BiOp regarding the total incidental take for several national forests set forth in the BiOp at Table 12, which FWS estimates to be 4,009, a figure adjusted to 3,744 four years later in the Jefferson BiOp. Pisgah BiOp, p. 54; Jefferson BiOp, p. 31. They allege that no information is provided in the Pisgah BiOp as to who prepared the table, who calculated the number of bats taken, and how the number of bats taken relates to the acreage taken in each forest. They also contend that if the low end of the estimate for take is used for each forest, the total take could increase two

to four-fold based on the fact that Table 12 sets the amount of take attributed to the Pisgah and Nantahala National Forests at 25 bats when the range for take in the Pisgah BiOp is actually calculated to be 25-100 bats. Plaintiffs further allege that although the Jefferson BiOp includes an effort to formulate an estimate of the total number of bats that summer roost in the forest (44.3), without any studies and the best available science behind the calculation, the number is suspect.

Defendants counter that the “no-jeopardy” determinations are not arbitrary and capricious. Defendants argue that Plaintiffs seek to add requirements to the jeopardy analysis that are not part of the ESA or its regulations by focusing on the need for a general assessment of what is necessary in order to bring about recovery of the entire species. Defendants contend that the ESA does not incorporate the requirements of the recovery analysis into the jeopardy analysis and does not require FWS as part of the jeopardy analysis to quantify a point at which the Indiana bat will either survive and recover or become extinct. Defendants also argue that Plaintiffs have not shown that the analysis of take exempted in other forests is arbitrary and capricious.

The Jefferson, Pisgah and 2007 Daniel Boone BiOps each contain a conclusion section that sets forth FWS’s opinion that the proposed activities are not likely to jeopardize the Indiana bat or result in the destruction or adverse modification of critical habitat. Pisgah BiOp, p. 55; Jefferson BiOp, pp. 31-32; 2007 Daniel Boone BiOp, pp. 91-94. Each of these BiOps includes the required analysis of the factors that must be considered in order to render a jeopardy opinion. Table 12 of the Pisgah BiOp sets forth the annual anticipated incidental

take in both acres and number of bats for the National Forests listed. Pisgah BiOp, p. 54.

The BiOp concludes based on these figures and taking into account the other factors addressed in the BiOp, including the conservation measures for the species, the additional terms and conditions in the BiOps, the abundance of available roost trees on the forests, and the small percentage of overall population likely to be affected from the annual anticipated level of take (1.1%), that there would not be a “significant cumulative reduction in population numbers of the Indiana bat from the activities.” Pisgah BiOp, p. 54. Plaintiffs have not pointed to anything in the record that casts doubt on the validity of the figures included in Table 12, which are apparently taken from previously issued BiOps, or on the other data on which FWS relies in the BiOp.

The Jefferson BiOp recognizes that in making a jeopardy determination, FWS must factor into the analysis previous BiOps and incidental take permits issued to private individuals. Table 3 of the BiOp summarizes the annual anticipated take in other National Forests as calculated in previous BiOps and shows an annual incidental take of 135,434 acres and 3,744 bats potentially affected, a number which the BiOp states represents about 1% of the known population of the species.⁹ Jefferson BiOp, pp. 31-32. The FWS opines that this number of bats “does not rise to the level of effect that would significantly reduce the reproduction, overall population, or distribution of the Indiana bat.” Jefferson BiOp, p. 32.

⁹Plaintiffs’ argument that the estimate of individual take would be much higher if the upper end of the range of take were used for each forest is not well-taken since Plaintiffs have not demonstrated that Defendants used the low end of a range of incidental take for any forests other than Pisgah and Nantahala.

Plaintiffs have not pointed to anything in the record that supports a determination that FWS's finding to this effect is arbitrary and capricious.

The 2007 Daniel Boone BiOp includes in an earlier section of the BiOp an in-depth analysis of previous incidental take authorized. 2007 Daniel Boone BiOp, pp. 64-68. The BiOp concludes after a review of the relevant facts that the existence of the Indiana bat is not likely to be jeopardized by the implementation of the revised forest plan and the associated activities related to green tree harvests, salvage/sanitation harvests, and prescribed burns. *Id.*, p. 91. The BiOp states that no destruction or adverse modification of critical habitat is expected, that FWS expects an increase in the amount of suitable foraging and roosting habitat as a result of these associated activities, and the actions are unlikely to result in the loss of maternity colonies for the reasons explained. *Id.*, pp. 92-93. The BiOp recognizes the species' well-documented ability to persist in the face of adverse effects and states that for the reasons listed, and because the range-wide population numbers are increasing in spite of the previous incidental take allowed and an environmental baseline which includes numerous activities that could result in adverse effects to the species, neither recovery nor survival will be reduced appreciably by the identified activities. *Id.*, p. 94. Once again, Plaintiffs have not pointed to anything in the record that supports a determination that FWS's findings are arbitrary and capricious or an abuse of discretion.

Nor are FWS's conclusions undermined by its failure to identify a "quantifiable figure" that represents the amount of incidental take that will significantly reduce the reproduction, overall population, or distribution of the Indiana bat or to specify the point at

which the Indiana bat can never be recovered. Plaintiffs have not shown how FWS's failure to perform such a calculation renders the conclusions reached arbitrary and capricious or an abuse of discretion.

5. Range-wide analysis

Plaintiffs claim that FWS's application of the term "jeopardy" to the Forest Service BiOps is arbitrary and capricious because the BiOps do not contain a range-wide analysis of the Indiana bat. The gist of this claim is that the BiOps violate the ESA because they make "no jeopardy" findings without adequately addressing the impacts on the Indiana bat determined in other BiOps and Incidental Take Statements and without considering the impact of state and private actions in combination with federal actions. Plaintiffs repeat their claims that the FWS has not pinpointed a number that is required for survival of the species and a number at which the species can be removed from the endangered species list. Defendants counter that the BiOps do contain a range-wide analysis of the species, including factors such as population trends and estimates, life history, habitat requirements and range-wide distribution.

A review of the Jefferson, Pisgah and 2007 Daniel Boone BiOps discloses that each includes a range-wide analysis of the status of the Indiana bat. For the reasons discussed above, Plaintiffs have not shown that the estimates of incidental take set forth in other BiOps not in issue lack scientific support so as to call into question FWS's reliance on those estimates in the BiOps before the Court. Nor have Plaintiffs shown that FWS acted in an arbitrary and capricious manner by failing to go beyond a "no-jeopardy" determination and

to pinpoint a “survival” or “recovery” number. The “no jeopardy” determinations do not violate the ESA on these grounds.

6. Incidental Take Statements

Plaintiffs allege that FWS has issued inconsistent Incidental Take Statements using different methods of measuring and mitigating take and finding Indiana bats, thereby making it impossible to determine the exact impact of the proposed actions on the species overall. Plaintiffs contend that such variations among practices in adjacent National Forests under the authority of the same agency are arbitrary and capricious and an abuse of discretion. Plaintiffs also object to the use of summer habitat as a proxy for take when FWS has never designated summer habitat as “critical habitat,” it has indicated that summer habitat is unknown, it is unsure what habitat the Indiana Bat requires for roosting, foraging and swarming, and it has not performed an analysis to show that habitat correlates to the actual population of the species.

Defendants argue that the Incidental Take Statements issued by FWS comply with the ESA. They contend that the ESA does not require use of any particular method for measuring or mitigating take and that the Indiana bat summer habitat is an appropriate proxy for take due to the difficulty of monitoring individual take. Defendants also assert that the BiOps contain the analysis that leads to the statement of ultimate conclusion, and they are therefore not arbitrary and capricious.

As an initial matter, Plaintiffs have not shown that the decision to use summer habitat as a proxy for take is unreasonable or illogical. The BiOps demonstrate that much has been

learned about Indiana bat summer habitat and foraging habitat in recent years. Each BiOp contains a detailed discussion of the factors that determine the suitability of a tree and its location as a roost site, the tree species that have been reported to be used as roosts by Indiana bats, the characteristics of these trees that make them suitable as roosts, the roosting needs and habits of the species, and the Indiana bat's foraging habitat and behavior. Pisgah BiOp, pp. 19-24; Jefferson BiOp, pp. 10-12; 2007 Daniel Boone BiOp, pp. 39-45, 49-63. In addition, the Jefferson and Pisgah BiOps address in some detail the habitat conditions for the species in the various forests, while the Daniel Boone BiOp indicates that suitable summer habitat is located throughout the forest. Pisgah BiOp, pp. 29-38; Jefferson BiOp, p. 18; 2007 Daniel Boone BiOp, pp. 83, 91. Thus, there appears to be sufficient information available about the species' summer and foraging habitat to allow FWS to formulate an opinion as to the number of bats that might be impacted by a potential loss of that habitat. At the same time, the BiOps acknowledge that there is a great deal of uncertainty surrounding the estimated number of bats that summer on each forest and the level of incidental take. The BiOps explain why such information is so difficult to obtain. This uncertainty, however, does not indicate that the use of habitat as proxy is unreasonable. Rather, given the gaps in the scientific data and the difficulties inherent in documenting the number and location of the bats, it appears that FWS has little choice at this point in time but to use habitat as a proxy, however rough an estimate of take the proxy method might yield.

Plaintiffs have not pointed to specific evidence to show that FWS abused its discretion or acted in an arbitrary and capricious manner in determining the amount of take

using habitat as a proxy. FWS did not arbitrarily perform a simple “x” number of acres equals “y” number of bats equation to ascertain the amount of take. Rather, FWS engaged in a careful analysis of habitat conditions and Indiana bat habits to reach its conclusions. The BiOps contain detailed discussions of how incidental take was determined. The Pisgah BiOp indicates the different ways in which incidental take is expected to occur and breaks down the take for two different areas of the forests, with one area being described as the most likely to harbor Indiana bats in the summer. Pisgah BiOp, pp. 60-65. The BiOp calculates the incidental take of acreage over a four-county area where summer populations, and specifically maternity colonies, are present as 4,574 acres annually, which represents a maximum of 2.9% of the optimal habitat and 1.3% of the forested acres managed by the Forest Service in the four-county area. Pisgah BiOp, p. 64. The BiOp estimates that this habitat disturbance level could impact 25 to 100 Indiana bats annually. *Id.*, n. 13. The BiOp concludes that because the probability of bats occurring in the remainder of the forests is so low and the quantity of habitat able to support them so high, implementation of the forest plan outside the four-county area at the levels described is not likely to adversely affect the Indiana bat. Pisgah BiOp, p. 65. The Jefferson BiOp provides a similarly detailed and full explanation as to how the estimated number of Indiana bats that summer on that forest was derived and sets forth in detail the basis for the conclusion that up to ten bats may be incidentally taken as a result of activities on the forest. Jefferson BiOp, pp. 22-23, 25-26. The 2007 Daniel Boone BiOp contains a thorough explanation of the ways in which FWS anticipates take may occur and why FWS believes the take calculated to be a significant

overestimate, and it provides a breakdown of the take among different types of tree loss. 2007 Daniel Boone BiOp, pp. 95-97.

In short, the Jefferson, Pisgah and 2007 Daniel Boone BiOps contain careful and detailed analyses leading to the determination of the incidental take in each forest as a result of the proposed actions. There is no evidence that FWS ignored studies and scientific data or methods that were available to it in formulating the Incidental Take Statements or that its methodology was flawed. The mere fact that there may have been differences in FWS's methodology does not render the determinations reached arbitrary and capricious. The same is true with respect to FWS's determinations as to the appropriate mitigation measures to be undertaken. Plaintiffs have not shown any other basis for rejecting either FWS's methods or its conclusions.

7. Alleged failure to conserve the Indiana bat

Plaintiffs also allege that the Forest Service and FWS have violated the ESA by failing to conserve the Indiana bat. Plaintiffs premise this allegation broadly on "the Administrative Record" and a decline in the Indiana bat population, which they allege support their claim that the BiOps are flawed and invalid. Plaintiffs argue that it is not enough for the Indiana bat to barely "hang on" to survival and instead federal agencies must attempt to recover the species rather than simply attempt to insure its survival.

Defendants claim that the reasonable and prudent measures included in the Incidental Take Statements are sufficient to satisfy ESA requirements and include planning and implementation consistent with the strategies developed in the BiOps and other planning

documents, monitoring of timber sales and documentation of incidental take, and efforts to determine species distribution and use of the forests. Defendants argue that the species population decline does not support a finding of an ESA violation because this information was not before the decision-maker at the time of the decision and recent data shows that the population has rebounded rather than declined.

Plaintiffs' broad allegations of a decline in the species population are not evidence of flaws in the specific BiOps, including deficiencies in the proposed conservation measures recommended in the BiOps. See Jefferson BiOp, p. 37; Pisgah BiOp, pp. 70-71; Daniel Boone BiOp, pp. 100-01. This is particularly true given the documented increase in the species' population in recent years following decades of decline. Plaintiffs have not pointed to specific evidence to show that the BiOps violate the ESA by failing to conserve the Indiana bat.

8. Site-specific consultation

Plaintiffs allege that the Forest Service violates the ESA by engaging in formal consultation only at the plan level and not the site-specific level and by requiring formal consultation once every twenty years while failing to engage in consistent, constant monitoring, and specifically failing to use certain technology to document the number of Indiana bats. Plaintiffs claim that the Forest Service formally consults as to the forest plan and then "tiers" the action to the forest plan and the associated BiOp. In support of their position, Plaintiffs cite to portions of the record pertaining to the Monongahela National Forest.

Defendants dispute Plaintiffs' assertion that the Forest Service does not conduct consultation on a site-specific level. Defendants acknowledge that the Forest Service must enter formal consultation with an appropriate agency pursuant to 16 U.S.C. § 1536(a)(2) when it determines that an action is likely to adversely affect listed species or designated critical habitat. Defendants allege that the Forest Service consults with FWS on the effects of forest plans on listed species, and any site-specific consultation is "tiered back" to the plan-level consultation in addition to undergoing a separate analysis. Defendants also argue that this claim is not properly before the Court because Plaintiffs have not identified in their Third Amended Complaint a site-specific action for which they believe the Forest Service neglected its consultation duties and the record does not contain information on site-specific actions, so Plaintiffs' assertion is beyond the scope of the case.

Plaintiffs have not pointed to evidence in the record to show that the Forest Service violated its duty to engage in formal consultation in connection with the BiOps in issue or in regard to specific proposed actions in those forests. The "no jeopardy" determinations made in the BiOps cannot be deemed arbitrary and capricious or an abuse of discretion on this ground. Insofar as Plaintiffs mount a general challenge to the Forest Service's consultation practices, Plaintiffs' claim is not properly raised in this lawsuit under the APA.

9. Forest Service liability

Plaintiffs allege that the Forest Service's reliance on the BiOps formulated by FWS violates the ESA because the Forest Service has an independent substantive obligation to avoid taking actions that jeopardize the survival and recovery of the species, which it has

violated with respect to these BiOps. 16 U.S.C. § 1536(a)(2). Defendants argue that the Forest Service has complied with the ESA and Plaintiffs have made no showing that the Forest Service acted in an arbitrary and capricious manner by relying on the FWS BiOps in issue.

Because Plaintiffs have not pointed to specific evidence to show that FWS's decisions in connection with the Jefferson, Pisgah and 2007 Daniel Boone BiOps are arbitrary and capricious or an abuse of discretion, the Forest Service's reliance on these BiOps cannot be deemed arbitrary and capricious or an abuse of discretion.

VIII. Conclusion

In accordance with the foregoing, Plaintiffs' motion for summary judgment is **DENIED**. Defendants' motion for partial summary judgment is **GRANTED**. Plaintiffs' challenges to the following BiOps are **DISMISSED**: the Monongahela National Forest, West Virginia; the Pisgah National Forest Management Plan, North Carolina; Allegheny National Forest, Pennsylvania; Daniel Boone National Forest Management Plan with Special Amendment (2000); Removal/Salvage of Storm Damaged Trees on the Daniel Boone National Forest (2000); Daniel Boone National Forest (2007); and Jefferson National Forest, Virginia.

IT IS SO ORDERED.

Date: June 19, 2007

S/ Sandra S. Beckwith
Sandra S. Beckwith, Chief Judge
United States District Court